

# Ecology's Perspective on the Draft TC & WM EIS

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# Topics

- Decisions the Draft EIS supports
  - Cooperating Agency role
  - What we think is important in the Draft EIS
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# Why This EIS Matters

- How much waste to retrieve before tanks are closed
  - How to close the single-shell tanks
  - How to treat tank waste
  - Disposal of Hanford waste
  - Whether the site can handle any more offsite waste
  - How to address secondary waste
  - How to dismantle FFTF
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# What We Did

## (elements of our cooperation)

- Agreed to alternatives
  - Agreed to key modeling assumptions
  - Developed detailed inventory cross-walk
  - Groundwater and vadose modeling review
  - Pre-decisional review of the draft in Washington DC
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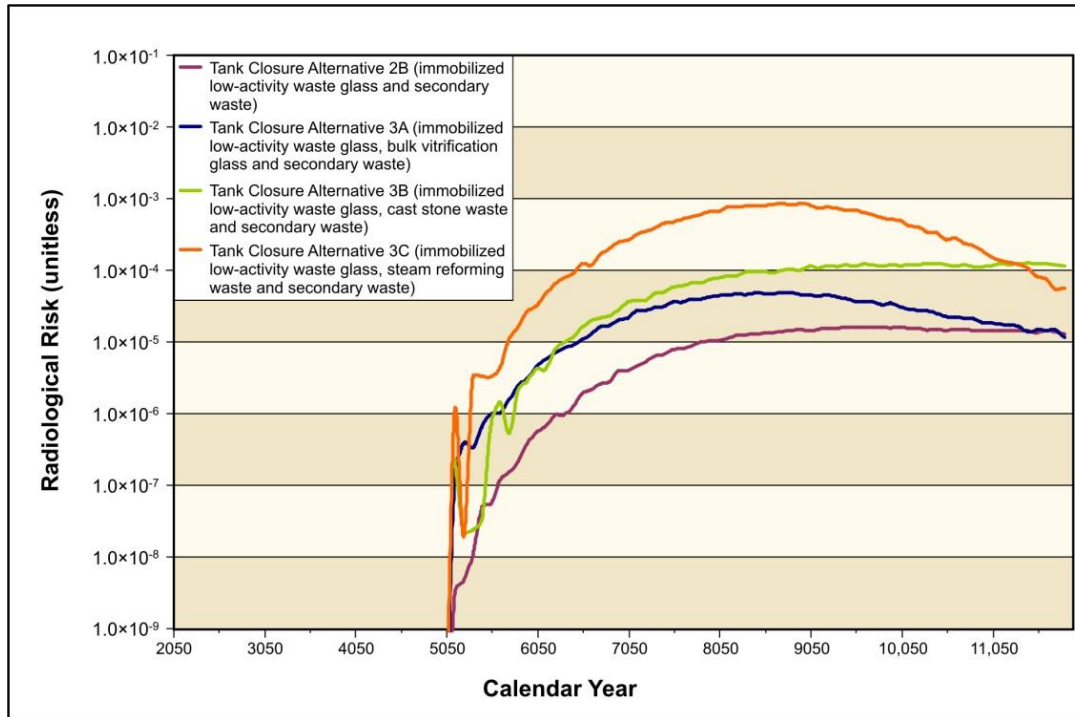
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# Conclusions on the Modeling

- Meets the standard of practice for the industry.
  - Adequately represents the known physical processes.
  - Met Ecology expectations for comparing two flow fields (E and N), and sensitivity analyses
  - In the future we will need more detailed modeling to evaluate site-specific conditions for making closure decisions.
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# Preliminary Findings

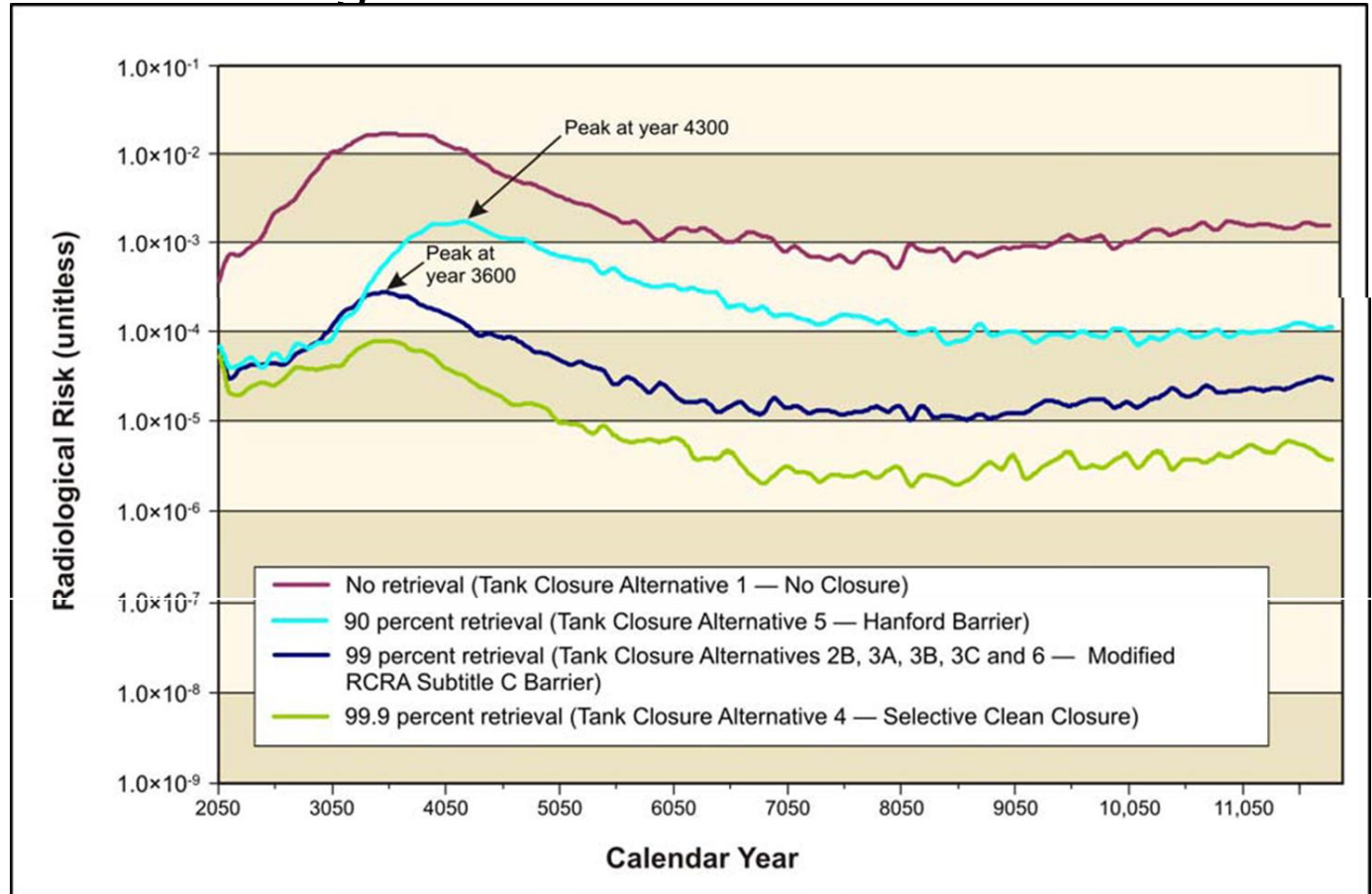
- We want USDOE to vitrify all Low Activity Waste (second LAW plant) -- Alternative 2B.



- For all glass options, most of the impacts come from secondary waste. Secondary waste causes significant groundwater impacts and needs robust mitigation to below levels of concern.

# Preliminary Findings (cont'd)

- Draft EIS indicates that greater than 99% retrieval makes a difference.



- Deep vadose zone remediation is needed (tank farms and elsewhere).

# Preliminary Findings (cont'd)

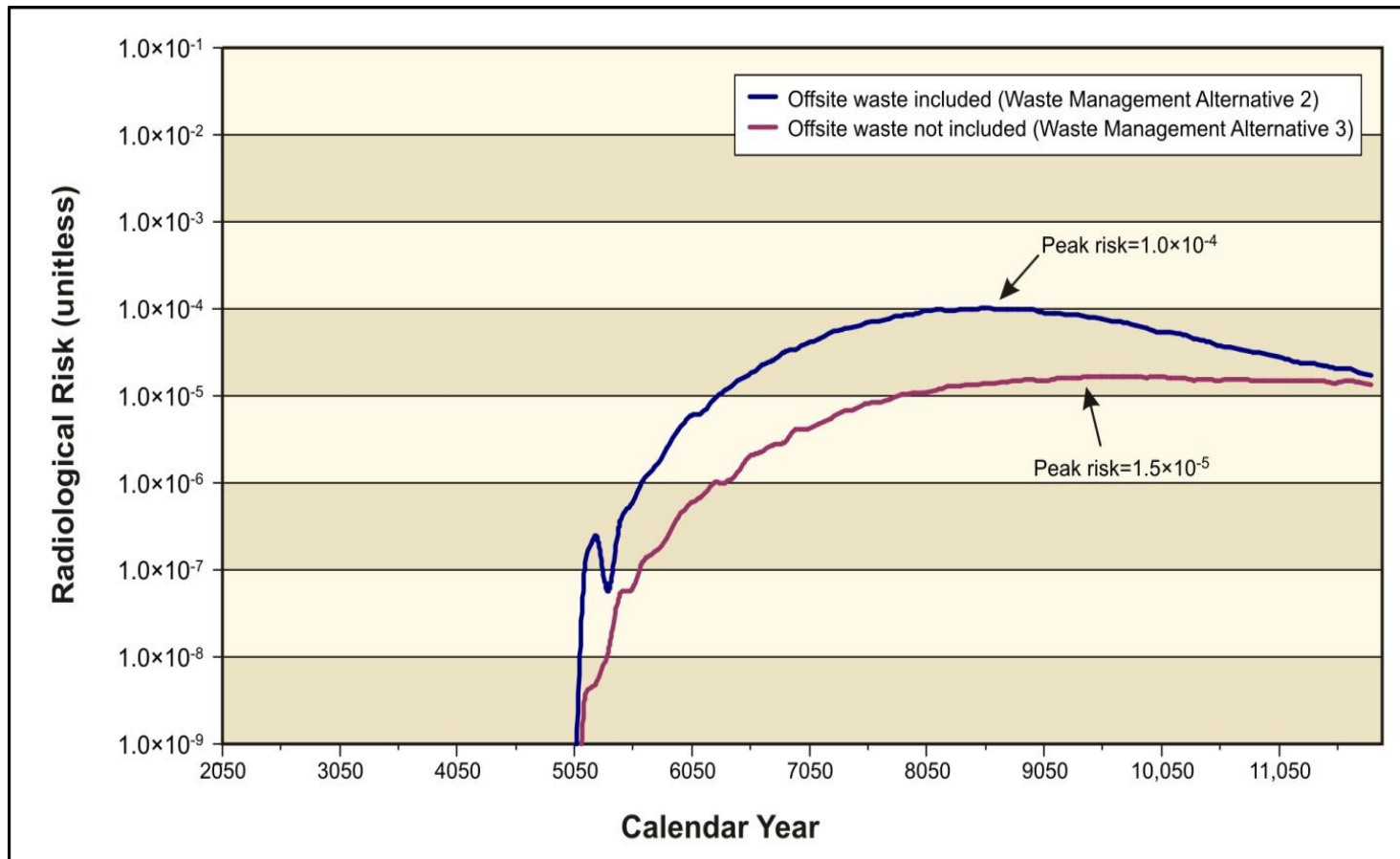
- Integrated Disposal Facility in 200 East is better from impact to groundwater.

	<b>Tank Closure Alternative 2B</b>		<b>Tank Closure Alternative 3A</b>	
Contaminant (picocuries per liter)	WM Alternative 2 (IDF-East)	WM Alternative 3 (IDF-East +IDF-West)	WM Alternative 2 (IDF-East)	WM Alternative 3 (IDF-East +IDF- West)
Technetium- 99	2041	20,209	2878	20,209
Iodine-129	18.7	172.6	18.4	172.6

- FFTF entombment is okay

# Preliminary Findings (cont'd)

- Offsite waste disposal causes significant environment impacts.



# Preliminary Findings (cont'd)

- We agree with some of DOE's choices:
  - Disposing of waste in IDF East only
  - Retrieving at least 99% of waste from the tanks.
- We are pleased the waste import moratorium is extended.

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# Preliminary Findings (cont'd)

- Issues needing more analysis:
    - ❑ Secondary waste!
    - ❑ Spent and failed high-level waste melters
    - ❑ Storage for vitrified high-level waste canisters in a deep geologic repository (when? where?)
    - ❑ Ways to mitigate contamination in the deep vadose zone
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# Summary

- Agreed with alternatives developed during scoping
  - Input data, quality assurance and modeling are acceptable.
  - Cumulative Analysis is acceptable and informative.
  - Presentation of the data makes it hard to find some answers.
  - Impacts in the future are significant
  - More work for mitigating impacts is vital.
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# Ecology Status

- Our Foreword is published in the Draft EIS.
  - We have a handout with a summary of our Foreword.
  - We have other handouts describing our perspective and findings.
  - We will develop detailed comments on the Draft EIS.
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